

CLAIMS

What is claimed is:

1. A substantially watertight grommet for use in securing a pin to a first object, the grommet comprising:

a head having an undersurface from which extends an elongate body, the body extending from the head in generally perpendicular relationship thereto, the head and the body defining therethrough a bore that is constructed and arranged to receive the pin;

at least one retention structure coupled to the body, the retention structure being constructed and arranged with respect to the head of the grommet such that when the grommet is received within a bore formed in the first object, the head and the retention structure will engage opposing surfaces of the first object so as to securely retain the grommet within the bore formed therethrough;

a sealing mechanism coupled to the head of the grommet that is constructed and arranged to form a substantially water-tight seal between an undersurface of the head and a surface of the first object while simultaneously forming a substantially water-tight seal between the pin and the bore defined by the head and body of the grommet; and,

a catchment mechanism comprising a first portion formed into a shaft of the pin and a second portion formed into the body of the grommet, the first and

second portions of the catchment mechanism being constructed and arranged to secure the pin within the grommet.

2. The watertight grommet of claim 1 wherein a lower portion of the sealing mechanism extends below an undersurface of the head of the grommet.
3. The watertight grommet of claim 2 wherein the lower portion of the sealing mechanism forms at least one circumferential seal.
4. The substantially watertight grommet of claim 1 wherein a upper portion of the sealing mechanism extends at least partially into the bore defined by the head and body of the grommet so as to form an interference fit between the sealing mechanism and the pin.
5. The watertight grommet of claim 3 wherein an upper portion of the sealing mechanism extends at least partially into the bore defined by the head and body of the grommet so as to form an interference fit between the pin and the sealing mechanism.
6. The watertight grommet of claim 1 wherein the first portion of the catchment mechanism comprises at least one ridge formed circumjacent to the pin.
7. The watertight grommet of claim 1 wherein the catchment mechanism is constructed and arranged to secure the pin within the grommet in a plurality of positions.

8. The water-tight grommet of claim 1 wherein the catchment mechanism comprises a detent formed upon an exterior surface of the pin such that when the pin is fully inserted into the bore defined by the body and head of the grommet, that portion of the pin having the detent formed thereon will protrude beyond a distal end of the body of the grommet, the detent acting to prevent withdrawal of the pin from the grommet.
9. The water-tight grommet of claim 1 wherein the sealing mechanism is a single molded piece.
10. The water-tight grommet of claim 9 wherein the head of the grommet has at least one part formed therethrough that allows the sealing mechanism to be overmolded integrally with the head of the grommet.